PAT-NO:

JP02000353702A

DOCUMENT-IDENTIFIER: JP 2000353702 A

TITLE:

LOW PERMITTIVITY MULTIPLE CARBON CONTAINING

SILICON

OXIDE DIELECTRIC USED IN INTEGRATED CIRCUIT

STRUCTURE,

AND MANUFACTURE THEREOF

PUBN-DATE:

December 19, 2000

INVENTOR-INFORMATION:

NAME

COUNTRY

ARONOWITZ, SHELDON SUKHAREV, VALERIY

ZUBKOV, VLADIMIR

N/A N/A

N/A

ASSIGNEE-INFORMATION:

NAME

COUNTRY

LSI LOGIC CORP

N/A

APPL-NO:

JP2000079900

APPL-DATE:

March 22, 2000

PRIORITY-DATA: 99274457 (March 22, 1999)

INT-CL (IPC): H01L021/316, H01L021/768

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a carbon containing silicon oxide dielectric, having the permittivity lower than the permittivity of

containing a silicon oxide dielectric formed using methyl silane as

precurser of low permittivity.

SOLUTION: This are provided a plurality of carbon containing silicon oxide

dielectrics of low permittivity used for an integrated circuit structure,

comprising silicon oxide substance containing silicon atoms to be

connected to

a plurality of carbon containing radicals consisting of carbon atoms and first

class hydrogen. Desirably, the plurality of carbon-containing radicals have

the chemical formulae (C)y(CH3)2. Here (y) in the chemical formula indicates

the integral number of 1 to 4 for a branched alkyl radical, the integral number

3 to 5 for an annular alkyl radical, (z) indicates 2y+1 for the branched alkyl

radical, and also (z) indicates 2y-1 pertaining to the annular alkyl radical.

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7/11/07, EAST Version: 2.1.0.14